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SUPPLEMENTAL TECHNICAL INSTRUCTIONS

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93-4-C	5/27/93

National Mapping Division

SUBJECT

Representation of Buildings in Digital Line Graphs and Primary Series Quadrangle Maps

BACKGROUND

Recent discussions focusing on production efficiency and product consistency have identified several building extraction and symbolization issues that require clarification. These issues include: 1) Conversion of second class and large first class buildings to solid black; 2) Overprinting of text and solid black buildings; 3) Application of minimum size building symbol; and 4) Depicting individual buildings in house omission tint areas.

1. Conversion of Large and Small Class 2, and Large Class 1 Buildings to Solid Black:

STI 91-2-C, issued April 22, 1991, calls for converting buildings to solid black at time of replacement and standard update mapping and at time of limited update mapping when all content is to be converted to standard colors. STI 93-2-C, issued April 26, 1993, revised the limited update specifications to require that existing photorevised buildings and all newly added buildings be shown in purple. In some cases, substantial effort will be required to convert small open and large hatched (class 2) or cross hatched (class 1) buildings at time of update mapping. However, these situations are the exception rather than the norm. They must be tolerated in order to implement the single building classification and symbolization scheme as quickly and completely as possible.

2. Text and Building Overprinting:

As a result of converting buildings to solid black, some conflicts may be created between existing text and buildings. These situations, like those in paragraph 1 above, are expected to be the exception rather than the norm.

3. Building Symbol Size Criteria:

Suggestions have been made by the mapping centers to increase the size of the largest building represented by the minimum size symbol from 80 feet to 100 feet along the longest axis (0.05 inch at 1:24,000 scale). This increase would result in more buildings being represented by the minimum size symbol and would require fewer buildings to be compiled to scale. The loss of outline detail for those buildings between 80 and 100 feet would be offset by the greater production efficiencies in data collection and product generation. The impact on product information content would be minimal.

4. Individual buildings in developed areas.

Currently, in limited update mapping, previously existing individual buildings are retained in areas converted to house omission tint areas (HIGH DENSITY BUILDING AREA in DLG-E templates). In digital revision these buildings can be deleted more efficiently and the map content will be consistent between new and revised tint areas.

INSTRUCTIONS

1. Conversion of Class 2 (large and small) and Large Class 1 Buildings to Solid Black:

Convert **ALL** second class buildings and first class buildings mapped as area features to solid black at time of replacement and standard update mapping. During limited update mapping match symbols for new information with existing photorevised content, or if the quadrangle has not been photorevised, match the symbols for new information with previously symbolized map content. Print all existing photorevised content and all new limited update information in purple.

2. Text and Building Overprinting:

Standard Update Mapping:
Resolve overprinting by modified text placement.

Limited Update:
Do not reposition overprinted text on a building symbol if the overprinting does not inhibit reading of the text. If the meaning of the text is lost due to overprinting, reposition the text.

3. Building Symbol Size Criteria:

The building size criteria for minimum size point symbols is now **100 feet** in the longest axis for Digital Line Graphs and Primary Series Quadrangle Maps.

DLG collection from existing graphics:
Collect buildings as point features if they are shown by the minimum size building symbol, or they are less than 100 feet along the longest axis. Collect larger buildings as area features.

Replacement mapping - traditional and digital methods:
Collect and represent all mapped content using current DLG and symbol standards.

Standard and limited update - traditional:
Show new buildings up to 100 feet along the longest axis by the minimum size point symbol; do not convert existing buildings from area features to point symbols even though they meet the new criterion.

Standard and limited update - digital:
Collect new buildings up to 100 feet along the longest axis by the minimum size point symbol; do not convert existing buildings from area features to point symbols even though they meet the new criterion.

4. Individual buildings in developed areas.

Replacement mapping - traditional and digital methods:
Represent all mapped content using current symbol standards, i.e., if the black plate is salvaged, delete all buildings, except churches, schools, and other public-use buildings, in existing and newly added/extended high-density building areas, from DLGs and maps.

Standard update - Traditional and digital methods:
Delete all buildings except churches, schools, and other public-use buildings (per the DLG-E templates), in existing and newly added/extended high-density building areas, from DLGs and maps.

Limited update - traditional methods:
Follow established practice which is not to delete buildings in newly added/extended high-density building areas.

Limited update - digital methods:
Delete all buildings except churches, schools, and other public-use buildings (per the DLG-E templates), in existing and newly added/extended high density building areas, from DLGs and maps.

APPLIES TO

All National Mapping Division primary series digital and graphic products.

ISSUED TO

MAC, EDC, MCMC, RMMC, and WMC.

APPROVED BY

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cc:

NMD	ADC/CR	PO Reading File
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